State Line Allocation

1. Page 73, Load and Wasteload Allocations, Idaho-Washington Stateline: Please explain how the temperature allocation for water temperatures at the Idaho-Washington state line based on observed conditions in 2004 will be applied. There will be years where water temperatures will be much warmer than presented in Figure 32 at the Idaho-Washington state line. We recommend dropping the reference to a specific year and referencing the maintenance of existing water temperature conditions in the Pend Oreille River at the state line.

   Response: *2004 is representative of critical conditions, which means that Ecology modeled the river under high temperatures and low flow conditions. This is done so that the TMDL allocations will likely be met during more extreme weather conditions. Daily average flows in June and July were at the 13th and 29th percentiles, respectively. Air temperatures in 2004 were very warm and exceeded the 90th percentile. (See pages 20-21 of the TMDL.) Therefore, if the weather is warm and flows are low, the results should not be that different from the TMDL.*

   To clarify the intent of applying the TMDL at the state line, Ecology edited the language in this section of the TMDL. Ecology replaced the term "allocation" with "assumption." The stateline assumption will be evaluated along with the allocations. Ecology will continue to collect monitoring data at Newport while agencies and organizations work to implement the TMDL. After several best management practices (BMPs) and other implementation measures have been applied and as resources allow, Ecology will use the monitoring data to update and rerun the model to determine compliance.

2. It appears that Idaho communities may have been given no opportunity for growth. This appears to be the result of the requirement that the summer/fall critical periods temperature at the Idaho/Washington border be maintained and Washington communities being given waste load allocations. I question whether the State of Washington can regulate permitted point sources in the State of Idaho.

   Response: *Ecology edited the language in the TMDL to clarify the intent of applying the TMDL at the state line. Ecology replaced the term "allocation" with "assumption." Ecology is not regulating point sources in Idaho by making an assumption about water temperature at the state line. Ecology had to make a baseline temperature assumption at the state line in order to establish allocations in Washington. The Idaho Department of Environmental Quality (IDEQ) is responsible for determining how sources in Idaho meet Idaho's water quality standards and with Washington's standards when the water crosses the state line. Because the state line assumption is based on a high temperature, low-flow year (see response to question 1 in this section), Ecology anticipates that IDEQ will not need to take further action.*

3. It seems disingenuous to allocate all the benefit from Albeni Falls Dam to the downstream users to "ensure viability of load and wasteload allocation established for downstream locations". The allocation at the state line should be the heat at natural conditions plus a portion of the load capacity allowance for existing use and growth. It is difficult to imagine but should the dam ever be removed, the TMDL would force Idaho users to cool 100% of the river even if no discharge was received upstream of the state line mostly for the benefit of downstream dischargers. Additionally, there may be some natural phenomenon that causes the water temperature at the state line to increase which Idaho dischargers have no control over yet would be responsible for mitigating. Idaho cannot be liable to mitigate a natural phenomenon.

   Response: *Loading capacity in the Pend Oreille temperature TMDL is the amount of heat the river can have in it and still meet state water quality standards. The TMDL acknowledges that at the state line, river temperatures meet standards because they are cooler than what occurred naturally. Therefore, establishing a loading capacity at the state line is not necessary. The goal of the TMDL is to maintain compliance with the temperature standard into the future, which is why Ecology assigned the assumption.*

   If something should happen to Albeni Falls Dam, Ecology would need to reassess the river because Albeni Falls Dam controls the river flows in Washington. See response to question 2 in this section.

4. Anti-degradation policies come into play during the permitting process where socio-economic factors can also be considered. Limiting the heat at the state line to 2004 values in a TMDL would prevent the consideration of socio-economic factors.

   Response: *Ecology's goal at the state line is to maintain temperatures that meet Washington's standard, which is also the goal of the anti-degradation policy. The intent of the language in the draft TMDL was to highlight this joint goal. To clarify the intent, Ecology edited the TMDL's language about the state line.*

   The purpose of setting a temperature value at the state line in the TMDL is to provide a baseline of what is coming from Idaho, from which to develop allocations in the TMDL for Washington sources. Anti-degradation policies (when the waters are cooler than the standard) would only come into play during the permitting process if a new or expanded discharge were to cause a measurable change in water quality. In the case of Washington dischargers, the measurable change would be defined as causing a greater than 0.3 C degree increase in temperature. The current point source discharge to the part of the river that is cooler than the temperature standard on the Washington side (City of Newport) is an existing discharger, and does not cause greater than a 0.3 C degree increase to the river. Therefore, the Tier II anti-degradation requirements to consider socio-economic factors would not apply. For Idaho dischargers that propose to cause a measureable change to temperature on the Idaho side, EPA would determine whether anti-degradation Tier II requirements would be imposed.

5. A TMDL should establish the loading capacity of a water body. No effort was made to estimate the loading capacity at the state line.

   Response: *See response to question 3 in this section. Establishing a loading capacity at the state line is not something that Ecology can do because it has no jurisdiction in Idaho.*

6. It is our understanding that the Idaho dischargers do not influence the temperatures measured in the Pend Oreille River (from the CE-QUAL modeling), as mentioned in the report. It would be nice if the report expanded on this topic to state that heat limits on the Idaho dischargers are not required to meet Washington water quality goals and beneficial uses.

   Response: *The suggested statement is beyond Ecology"s jurisdiction. The Idaho Department of Environmental Quality (IDEQ) is responsible to determine what actions, if any, are needed to comply with Idaho"s water quality standards and with Washington"s standards when the water crosses the state line. See also response to question 2 in this section.*

7. Accounting for upstream thermal impacts from Idaho is similar to the approach addressing cumulative impacts of pollutant sources flowing into Washington from Idaho in the Spokane River Dissolved Oxygen TMDL (USEPA, 2008). Therefore, the Draft should be revised to fully consider the impacts of the Albeni Falls Project, including the Project"s late-summer contribution to downstream WQ violations.

   Response: *Ecology analyzed the entire length of the Pend Oreille River in Washington from July through October. The analysis showed that the river met standards at the state line during this time frame.*

8. Page xii, first paragraph - Setting the allocation for the Stateline at 2004 conditions is inappropriate since excess heat flowing downstream in late summer is contributing further degradation downstream. The additional heat is contributing to temperature violations in WA and Kalispel waters detrimental to recovery of native trout populations.

   Response: *Ecology disagrees with this comment. The TMDL analysis indicated that the water flowing from Idaho is cooler now than historically, and this effect is detected for several miles downstream. See also the TMDL Analysis section of this Response to Comments.*

9. Page 73, Idaho-Washington Stateline - The Pend Oreille River water entering Washington is not cooler in late summer and only the use of CFA methodology makes it appear to be cooler. An allocation for "maintenance of existing condition temperatures observed in 2004" does not account for significantly warmer average river temperatures contributing to downstream violations during critical conditions in late summer.

   Response: *The TMDL analysis showed that downstream temperature violations are not the result of water temperatures from Idaho. The state line assumption protects the cooler water at that location. See the TMDL Analysis section of this Response to Comments.*

10. The draft TMDL provides a load allocation to the State of Idaho. Washington, however, has no authority to provide allocations to sources in Idaho. Please remove the reference to an allocation to sources in Idaho.

    Response: *The TMDL assumes that water coming from Idaho will be in compliance with Washington's water quality standards. This does not establish allocations to sources in Idaho. See also the response to question 2 in this section.*

11. The load allocation at the Idaho-Washington border as described on page 73 of the Draft Pend Oreille Temperature Water Quality Improvement Report is for the maintenance of existing condition temperatures as observed in 2004. Idaho cannot be accountable for climatic or other nonhuman-induced conditions that could increase water temperatures within the Pend Oreille River above temperatures Observed in 2004. Such conditions are beyond the control of sources in Idaho.

    Response: *2004 is representative of critical conditions, which means that Ecology modeled the river under high temperatures and low flow conditions. This is done so that the TMDL allocations will likely be met during more extreme weather conditions. Daily average flows in June and July were at the 13^{th} and 29^{th} percentiles, respectively. Air temperatures in 2004 were very warm and exceeded the 90^{th} percentile. (See pages 20-21 of the TMDL.) Therefore, if the weather is warm and flows are low, the results should not be that different from the TMDL, especially since the difference between natural and existing conditions is generally less than $1.0^{o}C$.*

12. Additionally, Idaho CE-QUAL-W2 modeling results evaluating the effect of NPDES-permitted facilities on temperatures in the Pend Oreille River are consistent with those reported on pages 59 and 67 of the Draft Pend Oreille Temperature Water Quality Improvement Report. Both results indicate that NPDES-permitted discharges have no measurable influence on existing maximum temperatures observed in the Pend Oreille River. As such, temperature limits on Idaho discharges are not required in order to meet Washington WQS. The TMDL should reflect this fact.

    Response: *The TMDL does not put temperature limits on Idaho dischargers. See response to question 2 and 6 in this section.*